

Together we can #RecycleBetter at Colleges and Universities

RecyclingWorks Webinar

August 16, 2018



Casella Company Overview:

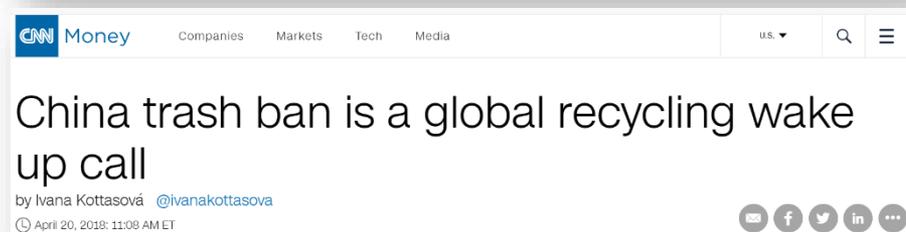
- Founded in 1975 with one truck
- We now have 1,900 employees serving over 170,000 customers
- Traded on NASDAQ as CWST
- Over \$500M in annual revenue
- Operating in MA, ME, NH, NY, PA, and VT
- Vertically integrated collection, transfer, recycling, and disposal operations
- **Recovering over 1 million tons per year!**
Includes more than 600,000 tons of recyclables and 400,000 tons of organics for beneficial use



Background

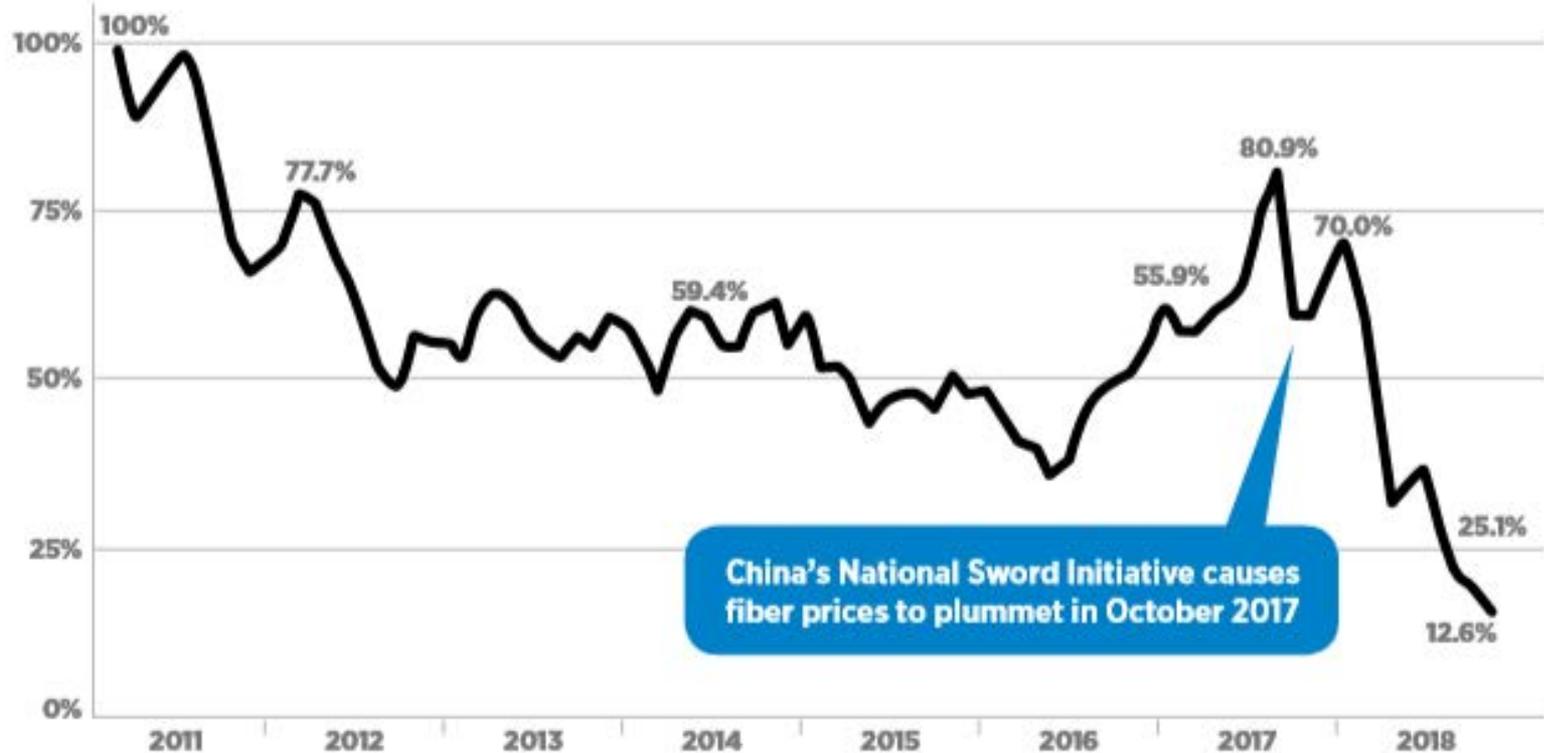
Big Changes

- New Chinese policies have reduced imports of recycled commodities, aiming to cut waste entering their borders via recycling streams
- The Northeast's largest glass processor shut its doors in March
- Product mix is shifting
- Contamination is rising



Recycling Markets Plummet

Due to global factors, the mix of recyclables in your bin are today worth only 12.6% of what they were worth in 2011. This has devastated the economics of recycling programs everywhere.



Contamination

- Contamination (unacceptable items) in the recycling stream have become a major problem
- We've seen average contamination rates increase by more than 50% over the past 10 years.
- The increase has been even greater in certain markets.
- Individual customers have sent us recycling loads with contamination rates of over 50%.
- Unfortunately, some of the top offenders are... college campuses.



#RecycleBetter Campaign

To get the word out, Casella has launched an outreach campaign called “Recycle Better”:

- Social Media
- Print Ads
- Webpage
- Videos
- Universal list
- Updated signage
- Targeted pilots
- More to come...

Can You Recycle Better? **Bagged Recyclables Don't Belong In Your Recycling Bin**
WHY NOT: They look too much like trash at the recycling plant.
INSTEAD: Keep it loose! Don't bag up your recyclables.
Visit casella.com/recyclebetter for **FREE** posters to display at your bins.

Can You Recycle Better? **Plastic Bags Don't Belong In Your Recycling Bin**
WHY NOT: They wrap around the sorting equipment.
INSTEAD: Recycle your bags at a participating grocery or retail store.
Visit casella.com/recyclebetter for **FREE** posters to display at your bins.

Can You Recycle Better? **Batteries Don't Belong In Your Recycling Or Trash Bin**
WHY NOT: They can cause fires, endanger workers, and harm the environment.
INSTEAD: Find your best disposal option at earth911.com.
Visit casella.com/recyclebetter for **FREE** posters to display at your bins.

Can You Recycle Better? **Electronics Don't Belong In Your Recycling Bin**
WHY NOT: They get broken down during sorting and can be unsafe.
INSTEAD: Look up your local electronic waste recycling program.
Visit casella.com/recyclebetter for **FREE** posters to display at your bins.

Can You Recycle Better? **Small Items Don't Belong In Your Recycling Bin**
WHY NOT: Anything under 2" will fall through the sorting equipment.
INSTEAD: Bring your own reusable cutlery and straws!
Visit casella.com/recyclebetter for **FREE** posters to display at your bins.

Can You Recycle Better? **Scrap Metal Items Don't Belong In Your Recycling Bin**
WHY NOT: They damage the sorting equipment.
INSTEAD: Look up your local scrap metal recycler.
Visit casella.com/recyclebetter for **FREE** posters to display at your bins.

Back to Basics... What's Acceptable?

CARDBOARD/PAPER



Corrugated Cardboard
(Wavy center layer)



Boxboard
(Dry-food boxes, paper bags, egg cartons, & rolls)



Junk Mail, Periodicals, & Office Paper
(Envelopes, catalogs, & soft cover books)

PLASTIC



Plastic Bottles, Jars, Tubs, & Lids
(Empty kitchen, laundry, & bath containers)

METAL



Aluminum & Steel Cans
(Empty cans, bottles, & foil)

GLASS



Glass Bottles & Jars
(Empty food & beverage bottles & jars)

Back to Basics... What's NOT Acceptable?



PLASTIC BAGS
DON'T BELONG



BAGGED RECYCLABLES
DON'T BELONG



CLOTHING/ TEXTILES
DON'T BELONG



FOOD WASTE/ LIQUIDS
DON'T BELONG



TANGLERS
DON'T BELONG



SCRAP METAL ITEMS
DON'T BELONG



BATTERIES OF ANY KIND
DON'T BELONG



ELECTRONIC WASTE ITEMS
DON'T BELONG



NO Medical Waste
(Rubber gloves, sharps, pills, etc.)



NO Hazardous Materials or Explosives
(Find safe and secure disposal near you)



NO Toys, Hangers, or Shoes
(Donate gently used items)



NO Coated Paper Items
(Items with a plastic lining such as waxed coffee or soda cups, & waxed paper plates)



NO Plastic Wrap, Films, or Tarps
(Food bags or wrappers, plastic wrap, shrink wrap, or tarps)



NO Wood, Waste, or Tires
(Wood, diapers, human/pet or yard waste, or rubber)



NO Disposable Items
(Styrofoam™, napkins, paper towels, tissues, plastic utensils, dirty recycling, register tape, condiment packets, straws, stirrers, & coffee pods)



NO Ceramics or Baking Glass
(Donate gently used items)

The problem with bags, textiles, tangles...



The Worst Contaminants

The worst contaminants put employees' **safety at risk, damage** the sorting equipment, **shut down** the plant, **degrade** outbound quality, or all of the above.



Back to Basics... Bottom Line

“Wish-Cycling” has always been unhelpful and has now become harmful.

Let’s recognize that recycling is a form of manufacturing: Garbage in, Garbage out.



Best Practices for Colleges & Universities



Targeted Training

Unique Challenges:

- 25% turnover each year
- Especially prone to “wish-cycling”
- Departments don’t always communicate

Recommendations:

- Start fresh. **Retrain everyone.**
- Tailor your training to each department
- Stress that there can be **no tolerance for contamination.**
- **Recruit and empower custodians** to identify and help address contamination hotspots.
- Ongoing focus. Recycling training is never “done”. Build an **annual training calendar.**



Bin Placement

Unique Challenges:

- Thousands of indoor trash and recycling bins
- Often inconsistent in shape, size, color, labeling, etc.

Recommendations:

- Conduct a campus-wide **inventory** of all trash and recycling bins. Create a map.
- Work with custodial to pair trash and recycling bins, coordinate colors/labels, and eliminate redundant bins.



Targeted Waste Audits

Unique Challenges:

- Waste and recyclables are generated at numerous points throughout campus.
- Multiple ongoing audits are required to identify problem areas and track improvements

Recommendations:

- Conduct multiple waste audits throughout the year at key locations across campus. Identify contamination hotspots. Track clean-up progress.
- Recruit and train multiple groups to support audits: dining services, sustainability office, student groups, etc.



Bag Removal

Unique Challenges:

- Nearly every campus uses plastic bags (bin liners) to collect and consolidate their recyclables
- These bags cause operational problems at the recycling facilities (**tangle in equipment**) and prevent detection of other **contaminants** in the stream.

Recommendations:

- No easy fix here. Work on eliminating other forms of **contamination**. Eliminate practice of “**nesting**” bags. Work on **reducing** the use of bags wherever possible. Together we’ll come up with solutions that work for both campuses and recycling facilities.



Other best practices

- Review your goals
 - Too many campuses have arbitrary waste and recycling goals with no clear plan for success
 - Best goals are data-driven, based on audits
 - Capture rates vs. Diversion rates
- Engage procurement
 - Review your purchasing, looking for ways to buy things that are recyclable and/or have high recycled content
 - Encourage reusable items across campus
- Think beyond campus
 - Help educate K-12 and broader community; Remind students and employees that these guidelines and practices apply at home too

Thank you!

To learn more, please visit:

casella.com



RESOURCE SOLUTIONS

RECYCLING | COLLECTION | ORGANICS | ENERGY | LANDFILLS